

AMENDMENT(S) TO THE CLAIMS

1. (Currently Amended) A flexible press cover for a shoe press roll used for at least one of dewatering and calendaring a moving fibrous web, said flexible press cover comprising:

a plastic layer;

a conventional reinforcement embedded in said plastic layer, said conventional

5 reinforcement used as a strengthening element, said conventional reinforcement being[[]] one of a woven fabric and a laid fabric, said laid fabric including a plurality of axially parallel longitudinal filaments and a plurality of circumferential filaments;

a first end region and a second end region associated with said flexible press cover; and

an additional strengthening element in a form of ~~an~~ at least one additional ~~reinforcement~~  
10 filament in at least one of said first end region and said second end region, said additional strengthening element making said flexible press cover suitable to be fixed to a rotatable supporting element of the shoe press roll, said rotatable supporting element having a round shape.

2. (Original) The flexible press cover of claim 1, wherein said rotatable supporting element is a spreader ring.

3. (Original) The flexible press cover of claim 1, further including an outer circumferential surface on said rotatable supporting element, said flexible press cover suitable to be fixed to said outer circumferential surface.

4. (Original) The flexible press cover of claim 3, further including an arrangement for

fixing said flexible press cover to said rotatable supporting element, said arrangement being free of fixing elements associated with said outer circumferential surface.

5. (Original) The flexible press cover of claim 1, further including an inner circumferential surface of said flexible press cover in at least one of said first end region and said second end region having said additional strengthening elements, said inner circumferential surface being cylindrical.

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6. (Original) The flexible press cover of claim 1, further including an inner circumferential surface of said flexible press cover in at least one of said first end region and said second end region having said additional strengthening elements, said inner circumferential surface being conical with an internal diameter that one of increases and decreases in an outward direction.

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7. (Original) The flexible press cover of claim 6, wherein said rotatable supporting element can be spread to enlarge a diameter of said rotatable supporting element.

8. (Currently Amended) The flexible press cover of claim 1, wherein said at least one additional reinforcement filament has said an additional plurality of circumferential filaments which are wound onto said conventional reinforcement from an outside of said conventional reinforcement.

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9. (Currently Amended) The flexible press cover of claim 1, wherein said at least one

additional reinforcement filament has a an additional plurality of circumferential filaments which are wound onto said conventional reinforcement from an inside of said conventional reinforcement.

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10. (Original) The flexible press cover of claim 1, wherein said additional strengthening elements include a thickened bead with an internal diameter which is smaller than an internal diameter of a remaining of said flexible press cover.

11. (Original) The flexible press cover of claim 10, wherein said additional strengthening is in only one of said at least one of said first end region and said second end region.

12. (Currently Amended) The A flexible press cover of claim 10 for a shoe press roll used for at least one of dewatering and calendaring a moving fibrous web, said flexible press cover comprising:

a plastic layer;

5. a conventional reinforcement embedded in said plastic layer, said conventional reinforcement used as a strengthening element, said conventional reinforcement being one of a woven fabric and a laid fabric, said laid fabric including a plurality of axially parallel longitudinal filaments and a plurality of circumferential filaments;

10 a first end region and a second end region associated with said flexible press cover; and an additional strengthening element in a form of at least one additional filament in at least one of said first end region and said second end region, said additional strengthening element

making said flexible press cover suitable to be fixed to a rotatable supporting element of the shoe press roll, said additional strengthening elements including a thickened bead with an internal diameter which is smaller than an internal diameter of a remaining of said flexible press cover,  
15 further including an other additional reinforcement being provided in said thickened bead.

13. (Original) The flexible press cover of claim 12, wherein said other additional reinforcement is at least one of said plurality of axially parallel longitudinal filaments, said plurality of wound circumferential filaments and said woven fabric.

14. (Currently Amended) The A flexible press cover of claim 1 for a shoe press roll used for at least one of dewatering and calendaring a moving fibrous web, said flexible press cover comprising:

a plastic layer;

5 a conventional reinforcement embedded in said plastic layer, said conventional reinforcement used as a strengthening element, said conventional reinforcement being one of a woven fabric and a laid fabric, said laid fabric including a plurality of axially parallel longitudinal filaments and a plurality of circumferential filaments;

10 a first end region and a second end region associated with said flexible press cover; and an additional strengthening element in a form of at least one additional filament in at least one of said first end region and said second end region, said additional strengthening element making said flexible press cover suitable to be fixed to a rotatable supporting element of the shoe press roll, wherein said additional strengthening elements are being formed of additional circumferential filaments which form a continuation of said conventional reinforcement, said

15 additional circumferential filaments can be being formed by at least one of an increased winding density and an increased filament thickness.

15. (Original) The flexible press cover of claim 1, wherein said in that the additional reinforcement has at least one band.

16. (Original) The flexible press cover of claim 1, wherein said at least one band is a woven fabric band.

17. (Original) The flexible press cover of claim 1, wherein in said at least one of said first end region and said second end region having said additional strengthening elements there is a greater thickness than an adjacent press cover region.

18. (Original) The flexible press cover of claim 1, wherein said additional strengthening elements includes a strengthening ring prefabricated from one of a plastic and a metal.

19. (Original) A flexible press cover for a shoe press roll used for at least one of dewatering and calendaring a moving fibrous web, said flexible press cover comprising:

a plastic layer;

a conventional reinforcement embedded in said plastic layer, said conventional

5 reinforcement used as a strengthening element;

a first end region and a second end region associated with said flexible press cover; and

an additional strengthening element in a form of a strengthening ring in at least one of

1 said first end region and said second end region, said strengthening ring being prefabricated from  
one of a plastic and a metal, said additional strengthening element making said flexible press  
10 cover suitable to be fixed to a rotatable supporting element of the shoe press roll, at least part of  
said strengthening ring is cast into said flexible press cover, as viewed in cross section through  
said strengthening ring.

20. (Original) The flexible press cover of claim 19, wherein said rotatable supporting  
element is a spreader ring.

21. (Original) The flexible press cover of claim 19, further including an outer  
circumferential surface on said rotatable supporting element, said flexible press cover suitable to  
be fixed to said outer circumferential surface.

22. (Original) The flexible press cover of claim 19, wherein said strengthening ring is  
anchored in said flexible press cover with an aid of a plurality of reinforcing filaments.

23. (Original) The flexible press cover of claim 19, wherein said strengthening ring is  
cast in following a casting of said plastic layer.

24. (Original) The flexible press cover of claim 19, wherein said strengthening ring is  
cast in at the same time as a cast of said plastic layer.

25. (Original) The flexible press cover of claim 19, wherein said strengthening ring has

a flange for fixing said flexible press cover to said rotatable supporting element belonging to the shoe press roll.

26. (Original) The flexible press cover of claim 25, wherein said rotatable supporting element is a cover carrying disk.

27. (Currently Amended) A shoe press roll, comprising:

a flexible press cover including a plastic layer, a conventional reinforcement embedded in said plastic layer, said conventional reinforcement used as a strengthening element, said conventional reinforcement being one of a woven fabric and a laid fabric, said ~~one of a woven~~

5        ~~fabric and a laid fabric includes~~ a plurality of axially parallel longitudinal filaments and a plurality of circumferential filaments; a first end region and a second end region associated with said flexible press cover; an additional strengthening element in a form of ~~an~~ at least one additional ~~reinforcement~~ filament in at least one of said first end region and said second end region, a cover inner surface of said flexible press cover in at least one of said first end region  
10      and said second end region having said additional strengthening elements, and an outer circumferential surface;

a stationary supporting element having a round shape;

a first roll end and a second roll end associated with said shoe press roll; and

15      a first rotatable cover carrying disk at said first roll end, a second rotatable cover carrying disk at said second roll end, said first rotatable cover carrying disk and said second rotatable cover carrying disk mounted on said stationary supporting element, at least one of said first rotatable cover carrying disk and said second rotatable cover carrying disk including a clamping

ring which can be displaced axially on an outer circumferential surface of said at least one of said first rotatable cover carrying disk and said second rotatable cover carrying disk, said clamping  
20 ring having a conical outer surface which engages in a conical inner surface of a ring that can be spread, said ring that can be spread resting in said cover inner surface, and an absence of fixing elements associated with said outer circumferential surface of said flexible press cover.

28. (Original) The shoe press roll of claim 27, wherein said clamping ring can be displaced axially by way of at least one screw.

29. (Original) The shoe press roll of claim 27, wherein said clamping ring can be displaced axially by way of a hydraulic pressure chamber.

30. (Original) The shoe press roll of claim 27, wherein said ring that can be spread has a collar for an axial fixing of said flexible press cover.

31. (Currently Amended) A shoe press roll, comprising:  
a flexible press cover including a plastic layer, a conventional reinforcement embedded in said plastic layer, said conventional reinforcement used as a strengthening element, said conventional reinforcement being one of a woven fabric and a laid fabric, said ~~one of a woven fabric and a laid fabric~~ includes a plurality of axially parallel longitudinal filaments and a plurality of circumferential filaments; a first end region and a second end region associated with said flexible press cover; an additional strengthening element in a form of ~~an~~ at least one additional reinforcement filament in at least one of said first end region and said second end

region, a cover inner surface of said flexible press cover in at least one of said first end region  
10 and said second end region having said additional strengthening elements and an outer  
circumferential surface;  
a stationary supporting element having a round shape;  
a first roll end and a second roll end associated with said shoe press roll;  
a first rotatable cover carrying disk at said first roll end, a second rotatable cover carrying  
15 disk at said second roll end, said first rotatable cover carrying disk and said second rotatable  
cover carrying disk mounted on said stationary supporting element;  
a mounting ring being provided which, outside said flexible press roll, can be inserted  
into at least one of said first end region and said second end region having said additional  
strengthening elements, and, subsequent to said mounting ring being inserted, can be fixed to at  
20 least one of said first rotatable cover carrying disk and said second rotatable cover carrying disk  
together with said flexible press cover.

32. (Original) The shoe press roll of claim 31, wherein said mounting ring has a conical  
outer circumferential surface matching a conical inner circumferential surface of said flexible  
press cover in at least one of said first end region and said second end region which has said  
additional strengthening elements.

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33. (Original) The shoe press roll of claim 31, wherein said mounting ring has a  
substantially cylindrical outer circumferential surface.

34. (Original) The shoe press roll of claim 31, wherein said mounting ring can be

inserted into an end region of said flexible press cover which is tapered conically outward.

35. (Original) The shoe press roll of claim 31, wherein said mounting ring has a collar for an axial fixing of said flexible press cover.